

Amendments to the Claims:

The following listing will replace all prior listing of claims in the application.

Listing of Claims:

1. A method of fabricating a thin layer, in which a weak buried region is created by implanting a chemical species in a substrate (1) in order to thereafter to be able to initiate a fracture of said substrate (1) along said weak region in order to detach said thin layer (6) therefrom, said method being characterized in that it includes the following steps comprising:

- a) a "main" implantation of a "main" implanting a first chemical species (4) in the substrate (1) at a "main" first depth (5); and
- b) at least one "secondary" implantation of at least one "secondary" implanting at least one second chemical species (2) less effective than the main species (4) at weakening the substrate (1), in the substrate (1) at a "secondary" second depth (3) different from said main first depth (5) and at a concentration higher than the concentration of the main said first chemical species (4),

wherein said at least one second chemical species is less effective than said first chemical species at weakening the substrate, and

wherein said steps a) and b) can be executed in either order, and in that it further includes the following steps:

- c) migration of diffusing at least a portion of said secondary at least one second chemical species from said second depth (2) up to the neighborhood vicinity of said first the main depth (5), and
- d) initiation of initiating said fracture along the main said first depth (5).

2. A fabrication method according to claim 1, characterized in that wherein said secondary second depth (3) is greater than said main first depth (5).

3. A fabrication method according to claim 1, characterized in that wherein said secondary second depth (3) is less than said main first depth (5).

4. A fabrication method according to claim 2 or claim 3, characterized in that said wherein implanting at least one secondary implantation second chemical species is carried out before implanting said main implantation first chemical species.

5. (Currently amended) A fabrication method according to any one of claims claim 1 to 4, characterized in that wherein said step c) diffusing at least a portion of said second chemical species is encouraged by appropriate further comprises applying a heat treatment.

6. (Currently amended) A fabrication method according to according to any one of claims claim 1 to 5, characterized in that wherein said step d) is carried out with initiating said fracture further comprises applying the aid of an appropriate a heat treatment.

7. (Currently amended) A fabrication method according to according to claim 5 and claim 6, characterized in that wherein steps c) and d) are carried out during the same heat treatment simultaneously.

8. (Currently amended) A fabrication method according to according to any one of claims claim 5 to 7, characterized in that wherein applying said heat treatment is carried out comprises carrying out said heat treatment within a thermal budget lower than that which would be necessary to initiate said fracture in the absence of steps b) and c).

9. (Currently amended) A fabrication method according to any one of claims claim 5 to 7, characterized in that said that wherein a predetermined thermal budget is complied with, if necessary by implanting more of the secondary species (2) than would be necessary to be able to initiate said fracture with a thermal budget higher than said predetermined thermal budget an additional amount of said at least one second chemical species.

10. (Currently amended) A fabrication method according to any one of claims claim 5 to 9, characterized in that wherein applying said heat treatment comprises one or more of heating in a furnace, and/or local heating, and/or laser heating.

11. (Currently amended) A fabrication method according to ~~any one of the preceding claims, characterized in that~~ wherein initiating said step d) fracture includes the application of applying mechanical stresses.

12. (Currently amended) A fabrication method according to claim 11, characterized in that wherein applying said mechanical stresses ~~comprise the use of comprises one or more of applying~~ a jet of fluid, ~~and/or the insertion of inserting~~ a blade into the implanted region, ~~and/or the application of applying~~ traction, applying shear or bending stresses to the substrate, (1) and/or applying acoustic waves.

13. (Currently amended) A fabrication method according to ~~any one of claims claim 1 to 12, characterized in that~~ wherein, before or during step d) initiating said fracture, a thickener is applied to the said substrate (1) to serve as a support for said thin layer (6) after ~~its separation~~ said fracture of said thin layer from the said substrate (1).

14. (Currently amended) A fabrication method according to ~~any one of claims claim 1 to 12, characterized in that~~ wherein, before or during step d), a initiating said fracture, a "handle" support is applied to the said substrate (1), after which the said thin layer (6) is transferred onto a final support.

15. (Currently amended) A fabrication method according to ~~any one of the preceding claims, characterized in that the main~~ claim 1 wherein said first chemical species (4) ~~consists of~~ comprises 0hydrogen-ions or atoms.

16. (Currently amended) A fabrication method according to ~~any one of the preceding claims, characterized in that the secondary~~ claim 1, wherein said at least one chemical species (2) ~~comprise(s) ions or atoms of~~ comprises at least one rare gas.

17. (Currently amended) A thin layer (6), characterized in that it has been fabricated by a method according to ~~any one of claims 1 to 16~~ claim 1.

18. (Currently amended) A thin layer (6) according to claim 17, characterized in that it has been transferred onto further comprising one of a flexible or rigid support

underlying said thin layer.

19. (New) A fabrication method according to claim 3, wherein implanting at least one second chemical species is carried out before implanting said first chemical species.

20. (New) A fabrication method according to according to claim 6, wherein steps c) and d) are carried out simultaneously.

21. (New) A fabrication method according to according to claim 6, wherein applying said heat treatment comprises carrying out said heat treatment within a thermal budget lower than that which would be necessary to initiate said fracture in the absence of steps b) and c).

22. (New) A fabrication method according to according to claim 7, wherein applying said heat treatment comprises carrying out said heat treatment within a thermal budget lower than that which would be necessary to initiate said fracture in the absence of steps b) and c).